

(PCT Article 36 and Rule 70)

Date of submission of the demand	Date of completion of this report
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/EP2004/013730

Box No. I Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following language _____, which is the language of a translation furnished for the purposes of:
- ☐ international search (Rule 12.3 and 23.1(b))
- ☐ publication of the international application (Rule 12.4)
- ☐ international preliminary examination (Rule 55.2 and/or 55.3)
2. With regard to the **elements** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:
- ☐ the international application as originally filed/furnished
- ☒ the description:
- pages 1-15 _____ as originally filed/furnished
- pages* _____ received by this Authority on _____
- pages* _____ received by this Authority on _____
- ☒ the claims:
- nos. _____ as originally filed/furnished
- nos.* _____ as amended (together with any statement) under Article 19
- nos.* 1-9 _____ received by this Authority on 13.06.2005 with letter of 13.06.2005
- nos.* _____ received by this Authority on _____
- ☐ the drawings:
- sheets _____ as originally filed/furnished
- sheets* _____ received by this Authority on _____
- sheets* _____ received by this Authority on _____
- ☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.
3. ☒ The amendments have resulted in the cancellation of:
- ☐ the description, pages _____
- ☒ the claims, nos. 1 _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to sequence listing (*specify*): _____
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
- ☐ the description, pages _____
- ☐ the claims, nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to sequence listing (*specify*): _____

* If item 4 applies, some or all of those sheets may be marked "superseded."

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Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement		
1. Statement			
Novelty (N)	Claims	<u>1-9</u>	YES
	Claims		NO
Inventive step (IS)	Claims	<u>1-9</u>	YES
	Claims		NO
Industrial applicability (IA)	Claims	<u>1-9</u>	YES
	Claims		NO
2. Citations and explanations (Rule 70.7)			
1. Prior art			
The following documents are deemed relevant:			
D1: GB 858 038 A (LEPETIT S.P.A) 4 January 1961 (1961-01-04)			
D2: DATABASE CAPLUS [Online] CHEMICAL ABSTRACTS SERVICE, COLUMBUS, OHIO, US; MARINETTI, ANGELA ET AL: "Enantioselective preparation of 2,4- disubstituted azetidines" XP002319678, found in STN Database accession no. 2000:336170			
D3: DATABASE CAPLUS [Online] CHEMICAL ABSTRACTS SERVICE, COLUMBUS, OHIO, US; TESTA, I. EMILIO ET AL: "Substances acting on the central nervous system. XIV. 3,3-Disubstituted azetidines" XP002319679, found in STN Database accession no. 1962:45914			
D4: DATABASE CAPLUS [Online] CHEMICAL ABSTRACTS SERVICE, COLUMBUS, OHIO, US; MURAKAMI, MASUO ET AL: "Diazoniadispiroalkane salts" XP002319680, found in STN Database accession no. 1970:111531			
D5: US-A-4 576 980 (DAI ET AL) 18 March 1986 (1986- 03-18)			

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	<p>D6: DATABASE CAPLUS [Online] CHEMICAL ABSTRACTS SERVICE, COLUMBUS, OHIO, US; LUNAK, STANISLAV ET AL: "Hardenable epoxy compositions with increased storage stability" XP002319681, found in STN Database accession no. 1986:554121</p> <p>D7: US-A-4 880 869 (AOKI ET AL) 14 November 1989 (1989-11-14)</p> <p>D8: US-A-5 276 166 (SWARUP ET AL) 4 January 1994 (1994-01-04)</p> <p>2. Novelty (PCT Article 33(2))</p> <p>The simple unsaturated azetidine derivatives claimed in claims 1-9 are novel. D1-D4 describe saturated azetidines. D5 describes azetidinediones, D6 saturated azetidines, D7 lactams, and D8 azetidinols. D1-D6 do not describe any uses as per claims 6-11.</p> <p>3. Inventive step (PCT Article 33(3)):</p> <p>D5 is the closest prior art, since D5, just as the present application, describes azetidines as hardening components which lead to a residue-free hardening of the corresponding resin (see D5, column 2, line 2).</p> <p>The difference with regard to the compounds from D5 is that, in the present application, unsaturated systems are claimed, whereas the compounds disclosed in D5 are azetidini-ones. Since none of the cited documents suggests such a</p>

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	<p>modification, the claims meet the requirements of PCT Article 33(3).</p>